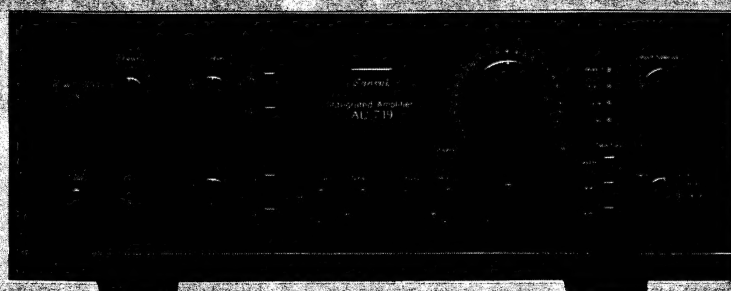


SERVICE MANUAL

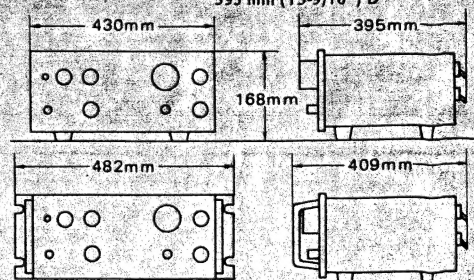
INTEGRATED STEREO AMPLIFIER

SANSUI AU-719



SPECIFICATIONS

Power output	
Min. RMS, both channels driven, from 10 to 20,000 Hz, with no more than 0.015 % total harmonic distortion	90 watts per channel into 8 ohms
Load impedance	8 ohms
Total harmonic distortion	less than 0.015 % at or below rated min. RMS power output
Intermodulation distortion (70 Hz : 7 kHz = 4:1 SMPTE method)	less than 0.015 % at or below rated min. RMS power output
Rise time	0.5 μ sec
Slew rate	± 170 V/ μ sec
Frequency response (at 1 watt)	DC to 400,000 Hz, ± 0 dB, -3 dB
Damping factor (1 kHz, both channels driven)	110 into 8 ohms
RIAA curve deviation (PHONO, 20 Hz to 20 kHz)	$+0.2$ dB, -0.2 dB
Input sensitivity and impedance (1 kHz, for rated power output)	
PHONO-1, 2	2.5 mV/47 kilohms
(Max. input capability; 230 mV at 1 kHz, less than 0.01 % total harmonic distortion)	
AUX, TUNER, TAPE PLAY	200 mV/47 kilohms
Output level and impedance (1,000 Hz)	
TAPE REC	200 mV into 47 kilohms/600 ohms
Channel separation (1 kHz, at rated power output)	
PHONO-1, 2	65 dB
AUX, TUNER, TAPE PLAY	70 dB
Hum and noise (short-circuit, A-network)	
PHONO-1, 2	88 dB
AUX, TUNER, TAPE PLAY	100 dB
Controls	
BASS	± 10 dB (50 Hz)
Tone selector	150 Hz, 300 Hz
TREBLE	± 10 dB (15 kHz)
Tone selector	3 kHz, 6 kHz
SUBSONIC	-3 dB (16 Hz), 6 dB/oct
MUTING	-20 dB
LOUDNESS (VOLUME control: -30 dB position)	
	10 dB at 50 Hz
	6 dB at 10 kHz
Power requirements	
Power voltage	100, 120, 220, 240 V (50/60 Hz)
For U.S.A. & Canada	
	120 V (60 Hz)
Power consumption	
Rated consumption	450 watts 530 VA
Dimensions	430 mm (16-15/16") W
	168 mm (6-5/8") H
	395 mm (15-9/16") D



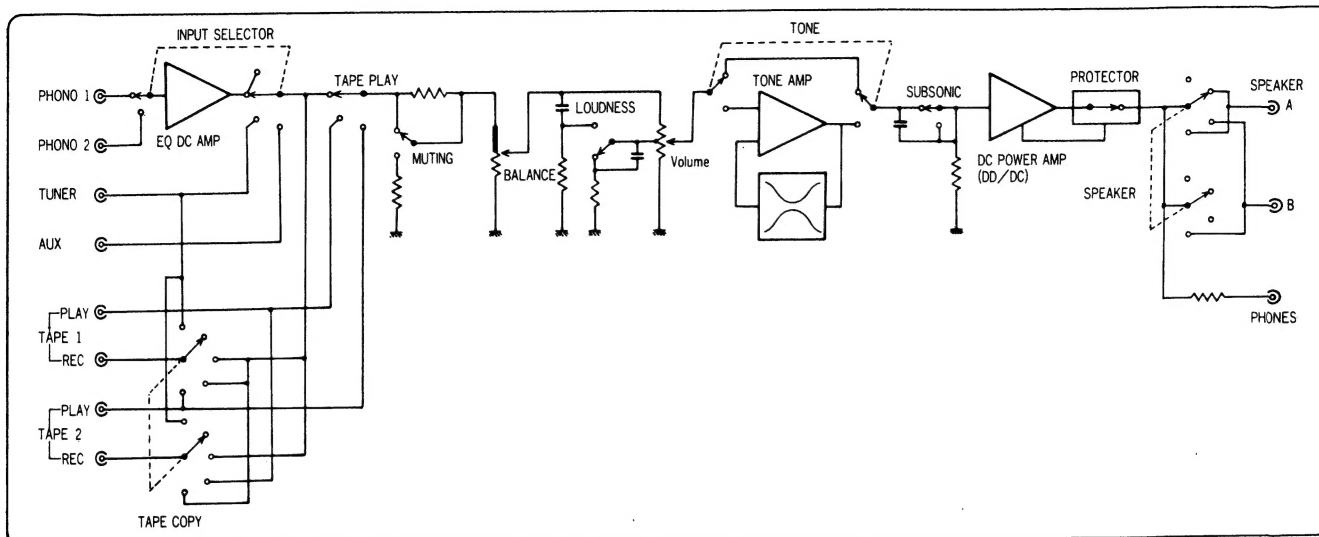
Weight 16.0 kg (35.3 lbs) net
17.7 kg (39.0 lbs) packed

- * Design and specifications subject to changes without notice for improvements.
- * In order to simplify the explanation illustrations may sometimes differ from the originals.

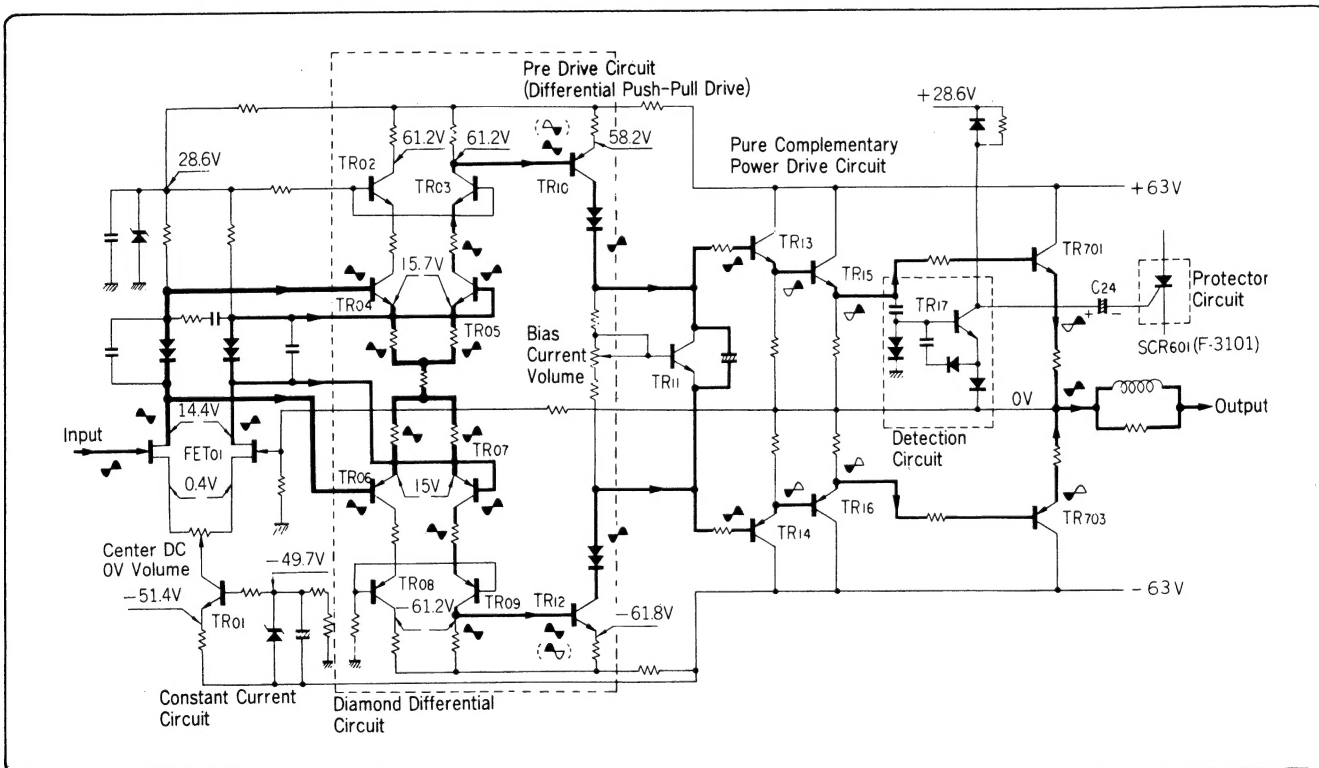
Sansui

SANSUI ELECTRIC CO., LTD.

1. BLOCK DIAGRAM



2. OPERATION BLOCK DIAGRAM OF DRIVER STAGE



3. ADJUSTMENTS

- Notes: 1. Master Volume Minimum
 2. Room Temperature 18°C ~ 28°C
 (65°F ~ 83°F)
3. When replacing some parts or circuit board, refer to description in REMARKS.
 4. For this adjustment, run the unit for more than 3 minutes after the power is switched ON.

3-1. Driver Circuit (F-2926, F-2927) Adjustment (See Fig. 3-1 & 3-2)

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	DC 0V Adj. L-ch	Speaker terminal (L-ch)	VR01 (L-ch) F-2926	DC 0V \pm 5 mV	Before turning ON power switch, set VR01 to center position.
2.	DC 0V Adj. R-ch	Speaker terminal (R-ch)	VR01 (R-ch) F-2927		
3.	Bias current Adj. L-ch	Between emitters of power transistors, TR701 & TR703 (See Fig. 3-1)	VR02 (L-ch) F-2926	DC 23 mV \pm 1 mV	<ul style="list-style-type: none"> Before turning ON power switch, turn VR02 fully counterclockwise. This bias current adjustment converts current value into voltage by Ohm's law.
4.	Bias current Adj. R-ch	Between emitters of power transistors, TR702 & TR704 (See Fig. 3-1)	VR02 (R-ch) F-2927		

3-2. Equalizer (F-3095) Adjustment (See Fig. 3-3)

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	DC 0V Adj. L-ch	Between GND & TP	VR01 (L-ch) F-3095	DC 0V \pm 50 mV	Before turning ON power switch, set VR01 & VR02 to center position.
2.	DC 0V Adj. R-ch	Between GND & TP	VR02 (R-ch) F-3095		

Fig. 3-1 Driver Circuit Board (F-2926, F-2927)

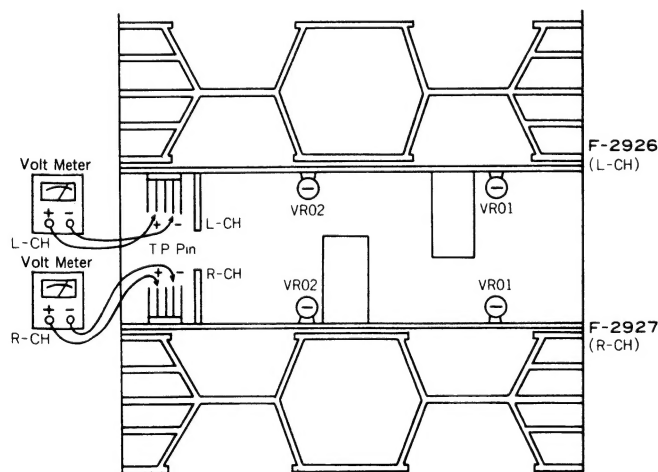


Fig. 3-2 Speaker Terminal

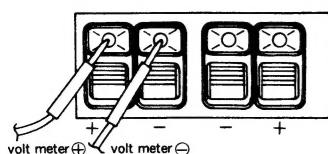
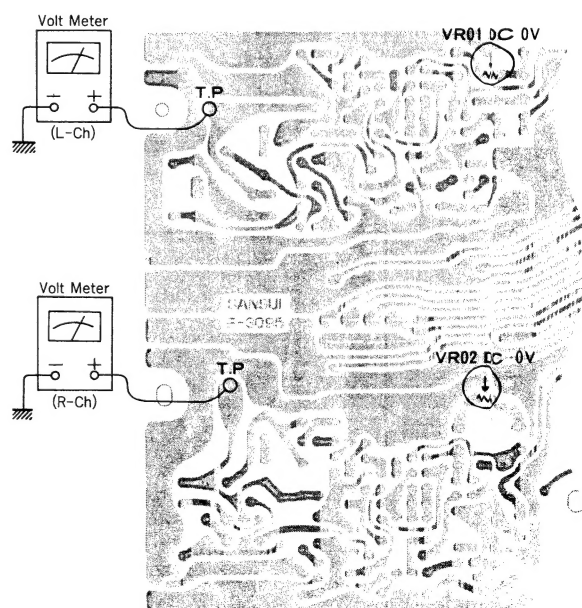


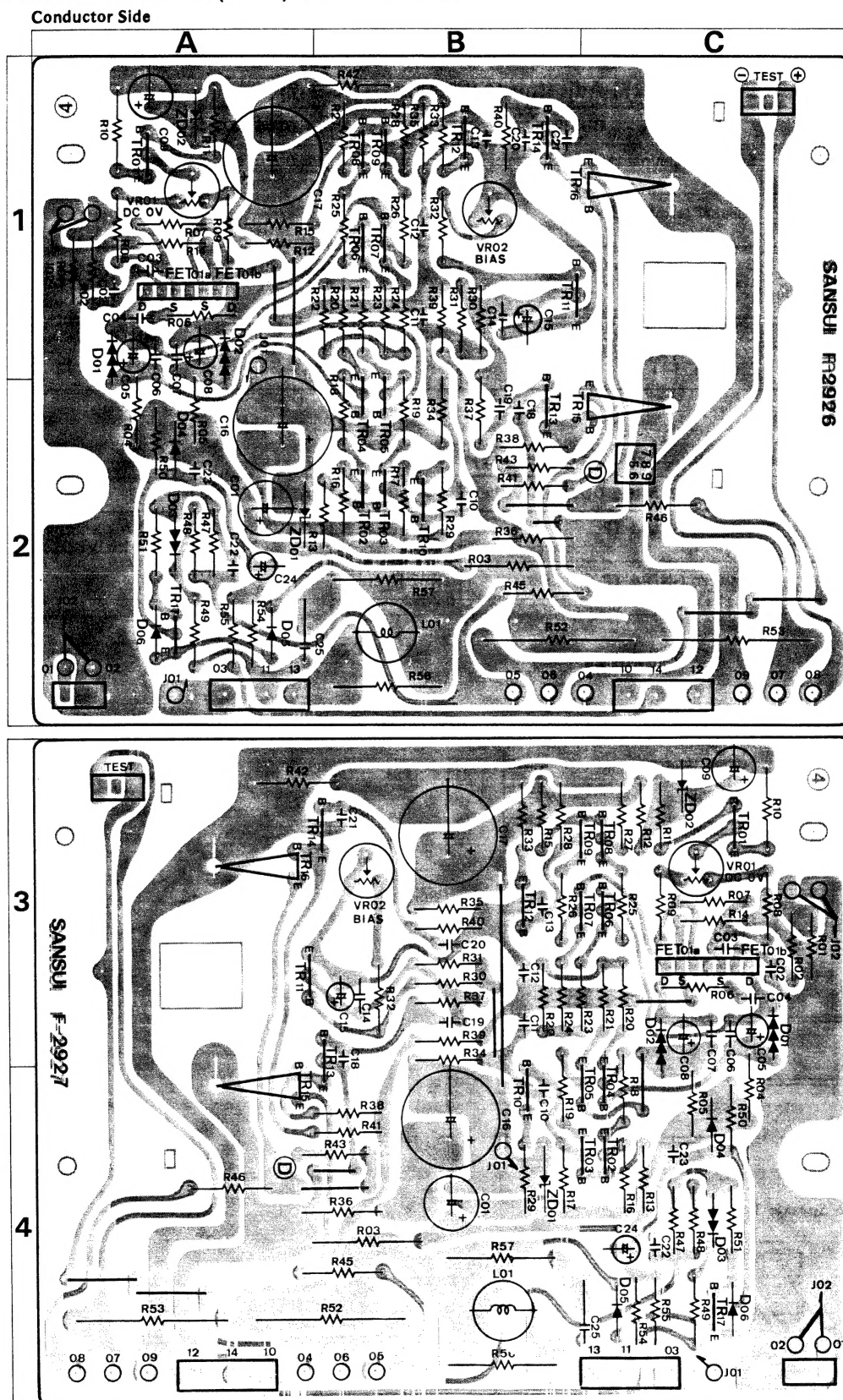
Fig. 3-3 Equalizer Circuit Board (F-3095)



4. PARTS LOCATION & PARTS LIST

- 4-1. F-2926 Driver Circuit Board (L-CH) (Stock No. 7572351)
 4-2. F-2927 Driver Circuit Board (R-CH) (Stock No. 7572361)

• Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors which was appended previously to each Sansui Manual.

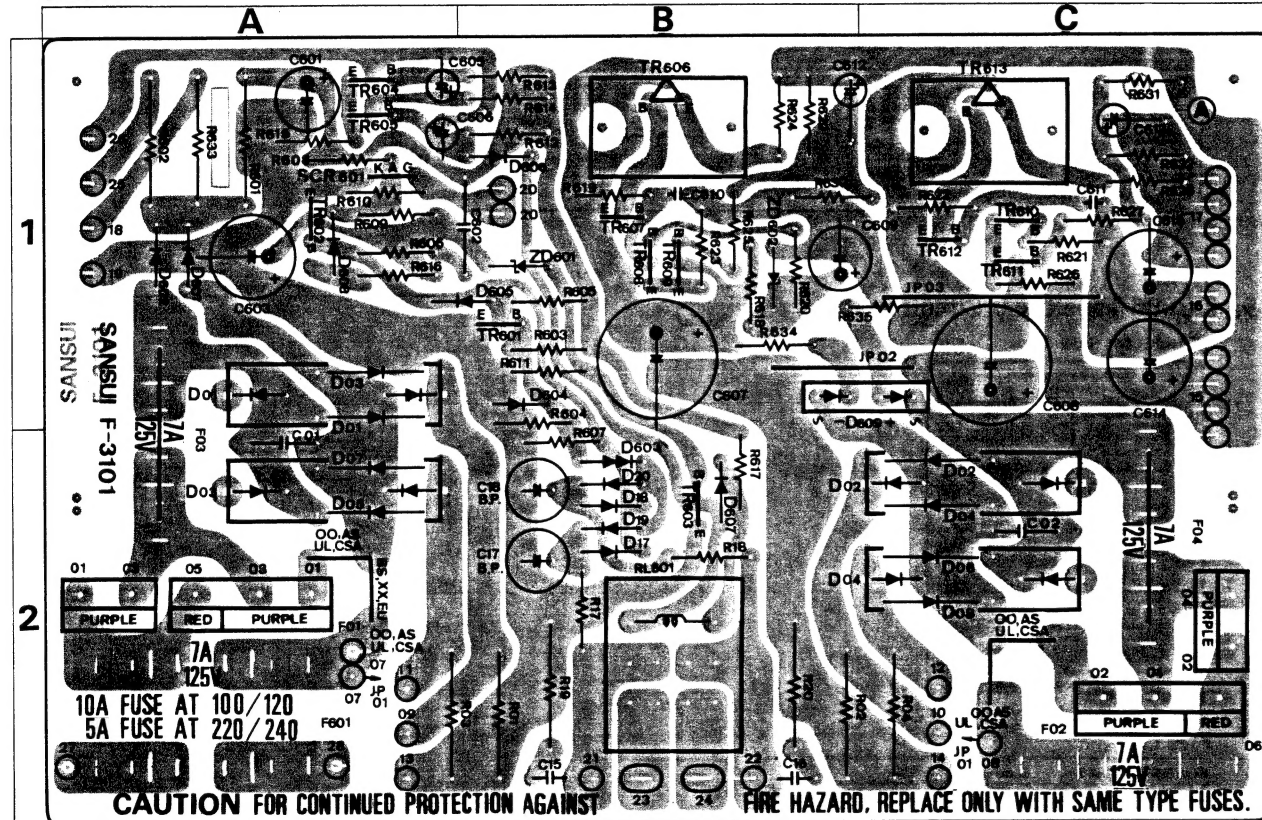


Parts List <F-2926, F-2927>

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
●Transistor				●Diode				F-2926 F-2927			
TR01	0306680, 1	2SC2071 B, V	1A 3C	D 01, 02	0340170	MV-103	1A 3C	R 03	0212182	1.8k Ω 2W N.I.R.	4B
TR02 ~ 05	0306740, 1	2SC1845 F, E	2B 4B, C	D 03	0340150	MV-12	2A 4C	R 04, 05	0231392	3.9k Ω 1/2W M.R.	4C
TR06 ~ 09	0301090, 1	2SA992 F, E	1B 3B, C	D 04	0310400	1N34A	2A 4C	R 52, 53	0159140	0.33 Ω 5W Ce.R.	4A, B
TR10	0301030, 1	2SA939 B, V	2B 4B	D 05, 06	0311160	1S2473D	1A 4C	R 56	0212109	1 Ω 2W	4B
TR11	0305951, 2	2SC945 Q, P	1B 3A	●Zener Diode				R 57	0212100	10 Ω 2W	4B
TR12, 13	0306680, 1	2SC2071 B, V	1B, 2B 3B	ZD01	0317190	RD-27F (B)	2A 4B	L 01	4290370	Filter Coil	4B
TR14	0301030, 1	2SA939 B, V	1B 3B	ZD02	0316310	RD13E B	1A 3C	VR01	1033570	Volume 100 Ω B DC 0V 1B	
TR15	0308441, 2	2SD382 M, L	2C 4A	C 02	0622101	100pF 125V P.C.	1A 3C	VR02	1035290	Volume 470 Ω B Bias	3B
TR16	0303271, 2	2SB537 M, L	1C 3A	C 03	0623220	22pF 125V P.C.	1A 3C				
TR17	0306740, 1	2SC1845 F, E	2A 4C	C 04	0622102	1000pF 125V P.C.	1A 3C				
●FET				C 10, 13	0669503	3pF 50V C.T.	2B, 1B 4B, 3B				
FET01	0370361 ~ 4	μ PA68H-L1, L2, M1, M2	1A 3C	C 25	0681014	0.047 μ F 400V F.C.	2A 4B, C				

4-3. F-3101 Power Supply & Protector Circuit Board (Stock No. 7503471)

Conductor Side

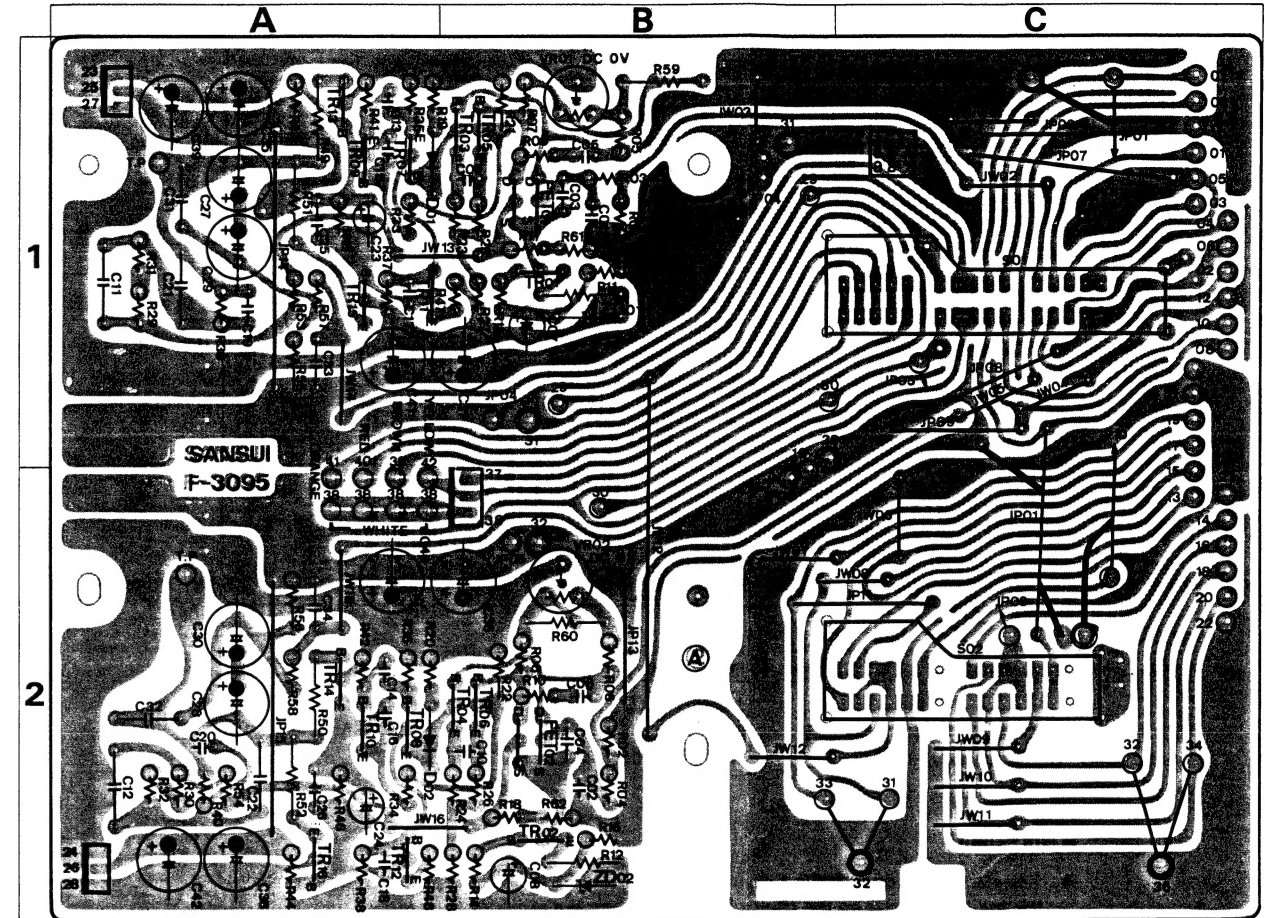


Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
●Transistor				D 17 ~ 20				C 01, 02			
TR601 ~ 05	0305951, 2	2SC945 Q, P	1A, B, 2B	D 601, 602	0310350	1002 (1S2227)	1A	R 01 ~ 04	0212332	3.3k Ω 2W N.I.R.	2A, B, C
TR606	0308451, 2	2SD356 D, E	1B	D 603	0340150	MV-12	2B	R 19, 20	0212100	10 Ω 2W N.I.R.	2B
TR607	0306811, 2	2SD357 D, E	1B	D 604 ~ 06	0311160	1S2473D	1B	R 601	0212391	390 Ω 2W N.I.R.	1A
TR608, 609	0300470, 1	2SA726 F, G	1B	D 607	0310340	10D1 (1S2226)	2B	R 602, 633	0212272	2.7k Ω 2W N.I.R.	1A
TR610, 611	0306071, 2	2SC1313 G, H	1B	D 608	0311160	1S2473D	1A	RL601	1150480	Relay	2B
TR612	0300470, 1	2SA726 F, G	1C	D 609	0311700	RB-152	1B, C	F 01	0432290	5A 125V AC Fuse	2A
TR613	0306071, 2	2SC1313 G, H	1C	●Zener Diode					0432290	7A 125V AC Fuse	
	0303281, 2	2SB526 D, E	1C	ZD601	0316390	RD6.2E B	1B		0434060	10A 250V AC Fuse	
	0303441, 2	2SB527 D, E	1C	ZD602	0316310	RD13E B	1B				
●Diode				SCR601	0350020	SCR 2SF656	1A				
D 01, 02	0311290	SS-3	1A, 2C								
D 03, 04	0311300	SS-3R	2A, 2C								

4-4. F-3095 Head Amp. Circuit Board (Stock No. 7551561)

Conductor Side



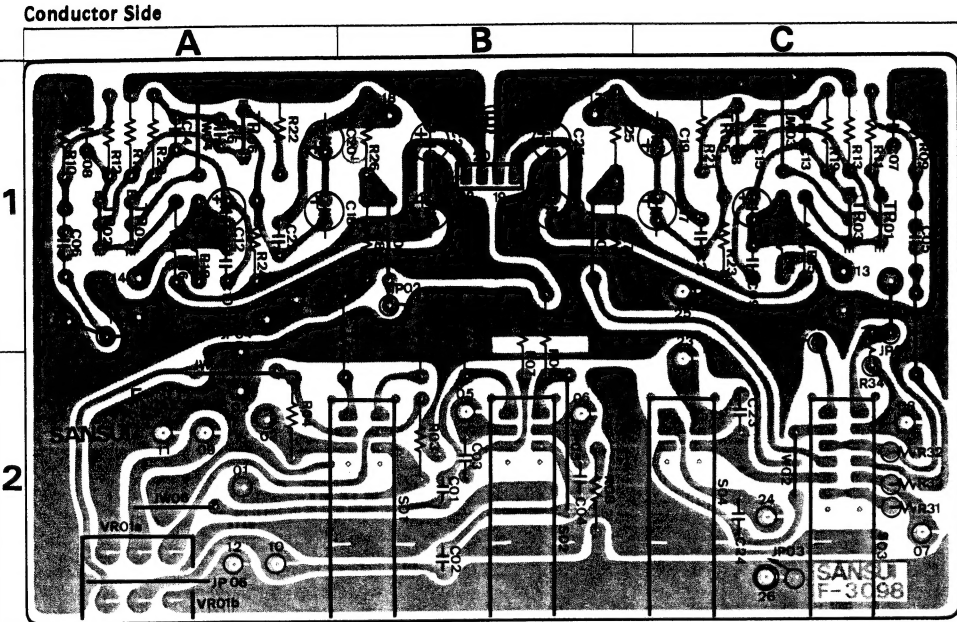
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
●Transistor				●Diode				R 05 ~ 08			
TR01, 02	0306740, 1	2SC1845 F, E	1, 2B	D 01, 02	0311160	1S2473D	1, 2A	R 29, 30	0231563	56k Ω 1/2W M.R.	1, 2A
TR03 ~ 06	0306071	2SC1313 G, H	1, 2B	●Zener Diode				R 39, 40	0231472	4.7k Ω 1/2W M.R.	1, 2A
TR07 ~ 10	0301090, 1	2SA992 F, E	1, 2A	ZD01, 02	0316320	RD13E C	1B, 2B	VR01, 02	1034190	Volume 470 Ω B, DC 0V	1, 2B
TR11, 12	0306740, 1	2SC1845 F, E	1, 2A	C 01, 02	0622151	150pF 125V P.C.	1, 2B	S 01	1190420	Rotary Switch, selector	1C
TR13, 14	0308521, 2	2SD438 E, F	1, 2A	C 03, 04	0623220	22pF 125V P.C.	1, 2B	S 02	1190410	Rotary Switch, tape copy	2C
TR15, 16	0303361, 2	2SB560MP E, F	1, 2A	C 05, 06	0622391	390pF 125V P.C.	1, 2B				
●FET				C 11, 12	0682029	0.05 μ F 100V F.C. (P.P.)	1, 2B				
FET01, 02	0370311, 2	2SK129A L, M	1, 2B	C 21, 22	0682016	0.01 μ F 100V F.C. (P.P.)	1, 2A				

● Abbreviations

C.R. Carbon Resistor	E.L. Low Leak Electrolytic Capacitor
S.R. Solid Resistor	E.B. Bi-Polar Electrolytic Capacitor
Ce.R. Cement Resistor	E.BL. Low Leak Bi-Polar Electrolytic Capacitor
M.R. Metal Film Resistor	Ta.C. Tantalum Capacitor
F.R. Fusing Resistor	F.C. Film Capacitor
N.I.R. Non-Inflammable Resistor	M.P. Metalized Paper Capacitor
C.C. Ceramic Capacitor	P.C. Polystyrene Capacitor
C.T. Ceramic Capacitor, Temperature Compensation	G.C. Gimmic Capacitor
E.C. Electrolytic Capacitor	

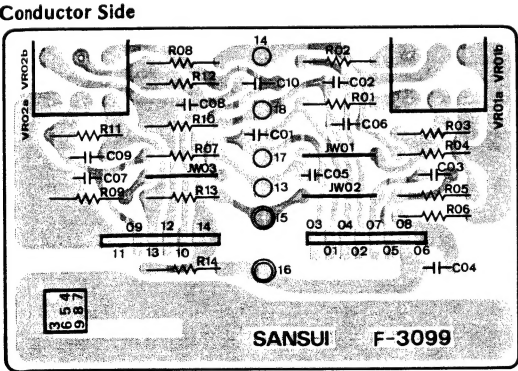
4-5. F-3098 Tone Control Circuit Board (Stock No. 7562941)



Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
• Transistor				S 01	1171770	Lever Switch, muting	2B
TR01 ~ 04	0306071	2SC1313 G, H	1A, 1C	S 02	1171770	Lever Switch, loudness	2B
TR05, 06	0301090, 1	2SA992 F, E	1A, 1C	S 03	1171800	Lever Switch, tone	2C
C 01, 02	0622511	510pF 125V P.C.	2B	S 04	1171770	Lever Switch, subsonic	2C
VR01	1015320, 1	Volume 250kΩ, balance	2A				

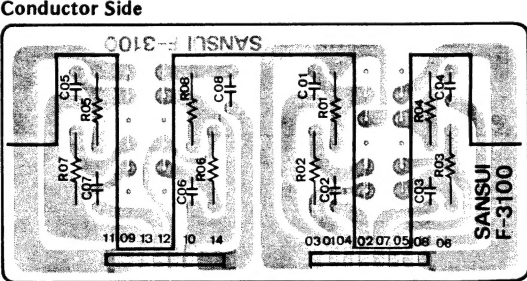
- The circuit boards, F-3099, F-3100, F-3094 & F-3096 are not supplied as the assembled, the individual parts on the circuit boards, however are provided for orders.

4-6. F-3099 Tone Circuit Board



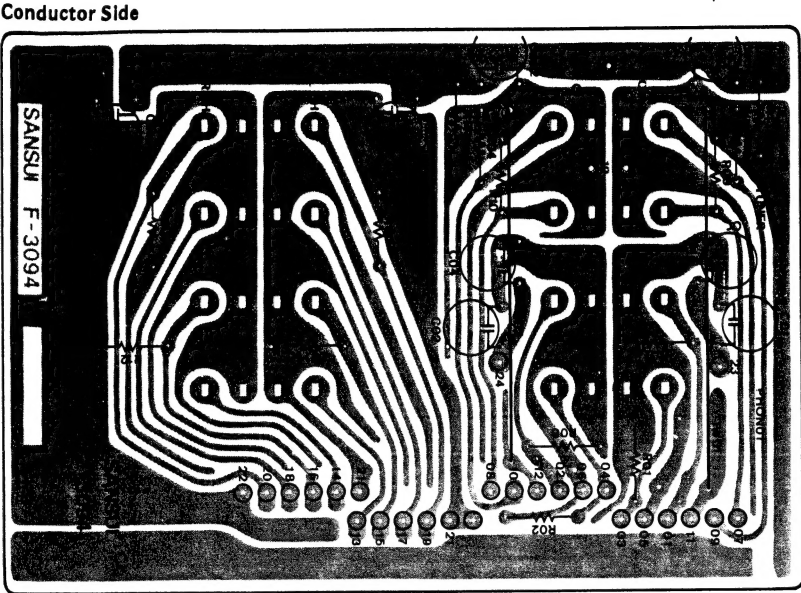
Parts No.	Stock No.	Description
VR01, 02	1015360, 1	Volume 100kΩ C, bass & treble

4-7. F-3100 Turn Over Circuit Board



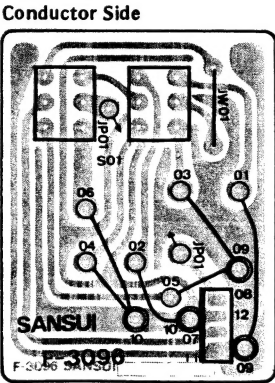
Parts No.	Stock No.	Description
S 01	1131410	Push Switch, turn over

4-8. F-3094 Input Circuit Board

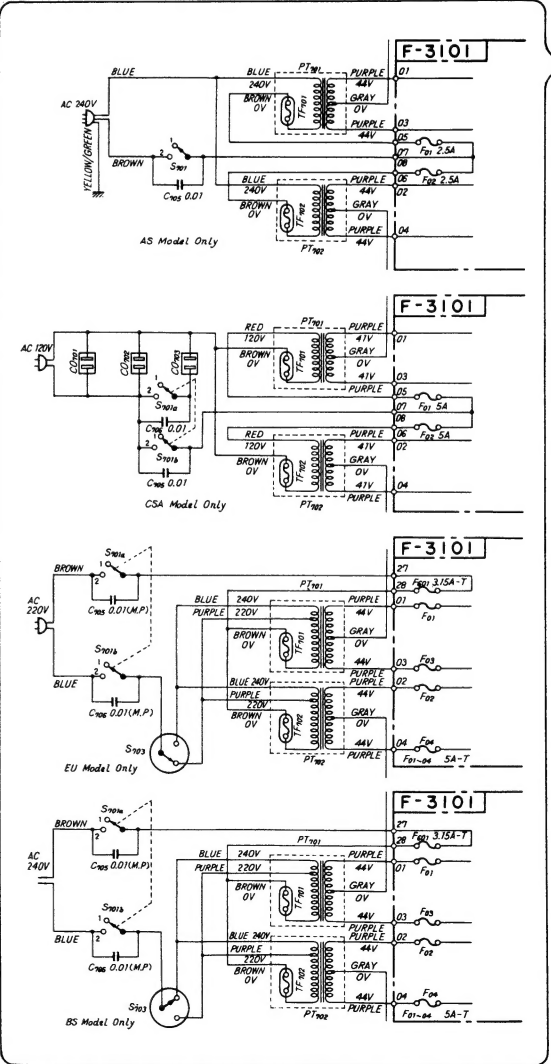


Parts No.	Stock No.	Description
2200580		4P Input Terminal, tape
2200620		4P Input Terminal, phone tuner, aux

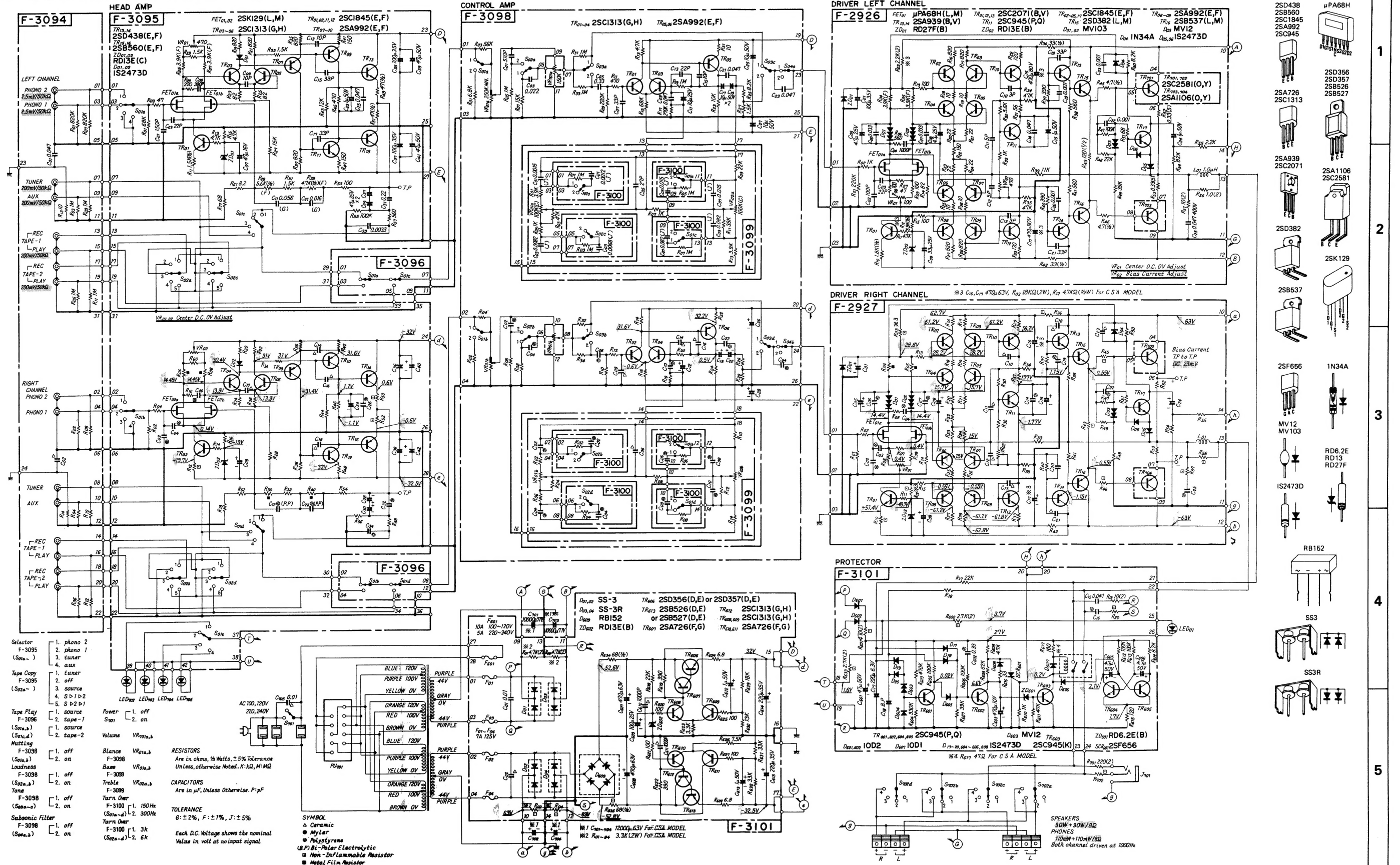
4-9. F-3096 Tape Copy Circuit Board



Parts No.	Stock No.	Description
S 01	1131400	Push Switch, tape play

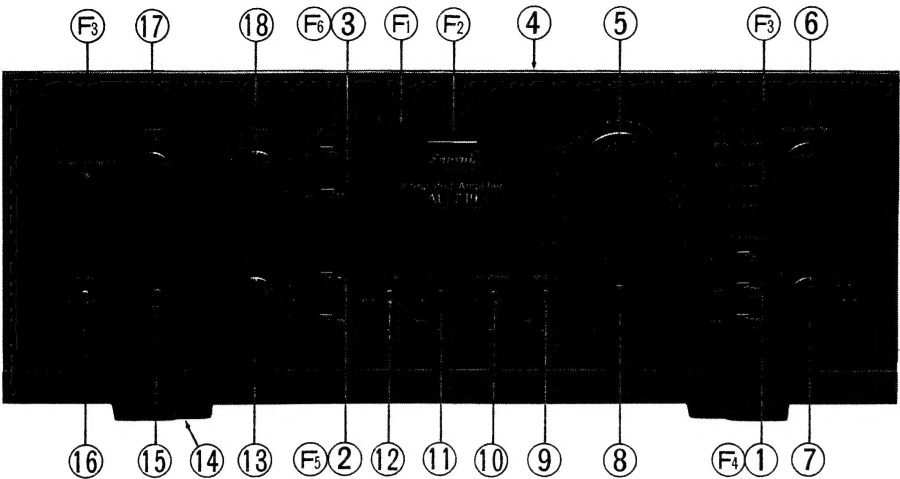


6. SCHEMATIC DIAGRAM

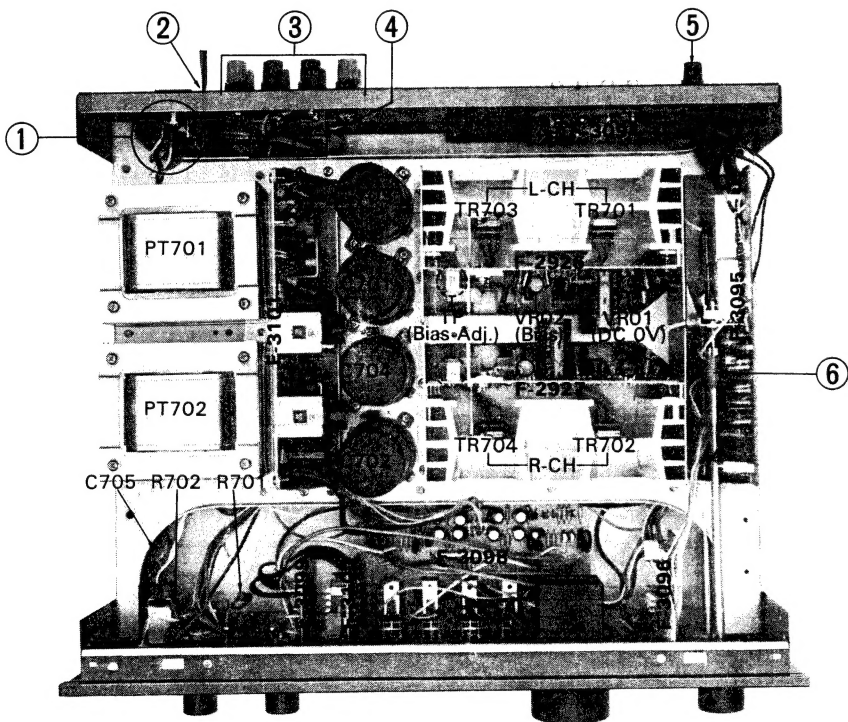


5. OTHER PARTS

5-1. Front View



5-2. Top View



Parts List <Front View>

No.	Stock No.	Description
F 1	7008390	Front Panel Ass'y
	5457540	Front Panel
	5048221	Masking Sheet
	5506880	Rubber Packing
F 2	5330660	Sansui Badge
	5152210	CS Ring
F 3	0319190	LED
F 4	5326620	Push Knob, tape play
	6906480	Spring
1	5286721	Knob Guide, tape play
	1131400	Push Switch, tape play
F 5	5326620	Push Knob, bass turn over
	6906480	Spring
2	5286721	Knob Guide, bass turn
	1131410	Push Switch turn over
F 6	5326620	Push Switch, treble turn over
	6906480	Spring
3	5286721	Knob Guide, treble turn over
	1131410	Push Switch, treble turn over
4	5006801	Bonnet
5	5318883	Knob, volume
6	1090450	Volume 150k Ω
	5319240	Knob, input selector
	1190420	Rotary Switch, input selector

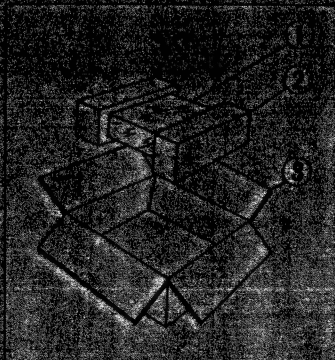
Parts List <Top View>

No.	Stock No.	Description
7	5319250	Knob, tape copy
8	1190410	Rotary Switch, tape copy
	5319280	Knob Balance Volume
9	1015320, 1	Volume 250k Ω , balance
	5326612	Knob, muting
10	1171770	Lever Switch, muting
	5326612	Knob, loudness
11	1171770	Lever Switch, loudness
	5326612	Knob, subsonic
12	1171770	Lever Switch, subsonic
	5326612	Knob, tone
13	1171800	Lever Switch, tone
	5319250	Knob, bass
14	1015360, 1	Volume, 100k Ω C, bass
	5507350	Leg
15	2430290	Jack, phone
	5326612	Knob, power switch
16	1172000	Power Switch
	5319250	Knob, Speakers
17	1101930, 1	Rotary Switch, speakers
	5319250	Knob, treble
18	1015360, 1	Volume 100k Ω C, treble

Note: Parts numbered with F is included in Front panel Ass'y.

7. PACKING LIST

Stock No.	Description
1115700	Wiring Diagram
9204490	Operating Instructions
1002000	Carrying Case



8. ACCESSORY PARTS LIST

Stock No.	Description
9238260	Schematic Diagram
9204490	Operating Instructions
5338340	Rack Mounting Adaptor

Sansui

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